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EXAMINER

THERIAULT, STEVEN B

ART UNIT	PAPER NUMBER
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2179

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03/31/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/637,433	Applicant(s) ALDRICH, WILLIAM J.	
	Examiner STEVEN B. THERIAULT	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is responsive to the following communications: RCE filed 03/17/2010.
2. Claims 1–5, 7-23 are pending in the case. Claims 1, 12, and 23 are the independent claims.
Claims 6 and 24 has been cancelled.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/17/2010 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. **Claims 1-5, 7- 19, 21- 23 are rejected under 35 U.S.C. 103(a) as unpatentable over Matlab report generator” Mathworks Inc et al. (hereinafter Matlab), 2001, in view of Sotomayor et**

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al. (hereinafter Sotomayor) U.S. Patent No. 5708825 issued Jan. 13, 1998, in view of Solecki et al (hereinafter Solecki) U.S. Patent No. 6055541 issued Apr. 25, 2000.

In regard to **Independent claim 1**, Matlab teaches a method comprising:

- Performing an analysis or synthesis operation on a graphical model representation that includes at least one executable graphical object (See Page 2, create conditional report and pages 5-8). Matlab shows generating a report during a simulation and executable components from the model in the report (See page 36).
- Producing a report from the analysis or synthesis operation (See Page 2, create conditional report)
- Associating one or more tags with a executable graphical object of the graphical model representation (See Page 1, bottom GUI uses standard tag sets compatible with existing standards and page 25, report generator tags, every figure in the report has a tag and page 38, user has added a component to the setup file and the tag is associated with an object in the model)
- Associating the one or more tags associated with the executable graphical object with one or more portions of the produced html (See page 28-29, tags are added)
- Receiving a selection of the executable graphical object in the executable graphical model representation upon completion of the report (See page 1, Matlab shows the output can be in HTML and page 5, Matlab allows the user to input a command during the report generation process that will allow display the portions of the report that are effected by the command. Further, the setup file editor (See page 20, allows the user to manipulate elements of the report that can effect the one or more portions of the report when selected). Moreover, page 14 states the report is displayed in a browser window upon completion of the report)
- Displaying, using the computer, a location in the report corresponding to the selected executable graphical object in response to the selection on a display device (See page 14).

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Matlab does not expressly recite:

- Generating, using the computer, one or more tags for one or more executable graphical objects of the graphical model representation while producing the report.
- Wherein associating creates a selectable connection from the executable graphical object to the portions of the produced report that corresponds to the executable graphic object

Matlab suggests the report generator generate a report that can include figures, data, variables and functions, images and figures (See page 10). Matlab teaches the output of the report can be in several formats, including HTML. Sotomayor teaches the widely known process of hyper linking a source and destination within a document (See column 2, lines 30-40). Matlab teaches the process of adding components to the report, via a wizard (See page 4). An example component is the chapter/numbering or indexing component and the image component (See page 40-42). Sotomayor also teaches an example of an indexing component where a document is semantically broken into an index by assigning tokens for hyperlinks for each key topic or chapter (See column 3, lines 40-67 and column 4, lines 1-10). The templates of Sotomayor can be a component added to Matlab. Sotomayor teaches a report is generated from the document as a summary page or presentation page via a template. The summary pages include assigned and associated tags to elements of the document embedded within the summary page (See column 4, lines 20-45). Sotomayor teaches an anchor or tag can be a word, phrase, or graphic (See column 5, lines 30-40) and are specifically linked to the portion of text, phrase or graphic (See also column 6, lines 49-56). The elements of the Matlab report generated in HTML can be tagged via this process, as the report is text or words in a document. Moreover, Sotomayor teaches the process of assigning a tag is processed by performing an analysis on textual data to generate the summary page (See column 8, lines 25-45). Sotomayor teaches the summary page has entries with hyperlinks to the destination anchors in the presentation page (See column 15, lines 1-20). Sotomayor teaches a wizard similar to Matlab that allows the user to edit the report using templates (See column 21, lines 1-67 and column 23, lines 20-67 and 24, lines 1-67). Sotomayor explicitly teaches a process of creating a selectable connection between the objects in the report by assigning a token to the section of the document (See column 27, lines 5-60 and column 33,

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lines 35-67). Therefore, the component addition in Matlab can be the template of Sotomayor for the purposes of generating an HTML document with hyperlinked objects indexed on a summary page. Matlab and Sotomayor both teach a process of converting data from one format to another and both teach outputting the document in HTML.

However Matlab and Sotomayor do not expressly teach:

- The graphical model representation provided in an executable graphical model editor program while producing the report.
- connection from the executable graphical object provided in an executable graphical model editor program wherein the report is provided as textual content

Matlab suggests the report generation but does not suggest viewing the model in an editor program.

However, in the same problem solving area of generating reports from models and displaying the information as html documents, Solecki teaches an automatic report generation system that allows for instant report generation of database information related to design analysis (See column 4, lines 35-55). Solecki teaches the system can generate a report in HTML, that allow for jumping from any section of the report to another with the selection of a hyperlink (see column 3, lines 55-67 and column 4, lines 1-10). Solecki teaches the model can be viewed within a report editor (See column 4, lines 19-35). Solecki teaches the output report can be text and viewed directly in the CAD system and allows the user to modify the links directly in the report. The system can output information about a given part or object model in the CAD system. Analysis can be performed on the part and the output can be shown on the interface. The design software outputs design space information to an object tree and to a report in real-time (See column 4, lines 35-67).

Accordingly, it would have been obvious to the skilled artisan at the time of the invention having the teachings of Matlab, Sotomayor and Solecki in front of them, to modify Matlab's component to specifically generate tags for elements of the report and creating a selectable connection between the objects in the report and to use the viewer of Solecki to see the html links in a viewer. The motivation to combine Matlab with Sotomayor comes from Sotomayor that this program can be used with a document conversion system that converts a document into a markup language (See column 35,

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lines 25-67 and column 36, lines 1-26) for the purposes of assigning HTML tokens to elements of a document, which allows selection and linking to related objects. The motivation to combine Solecki with Sotomayor and Matlab comes from within Solecki to have a report that presents data output from analysis of an engineering task in a manner meaningful to a user and to present in real time data from the analysis without having to use multiple pieces of software (See column 1, lines 30-50).

With respect to **dependent claim 2**, Matlab teaches the method in which the report is a document structured with portions corresponding to different elements of the graphical model representation (See page 1).

With respect to **dependent claim 3**, Matlab teaches the method in which the document is a structural coverage report (Page 4).

With respect to **dependent claims 4, 11, 22**, Matlab teaches the method in which the document is a code generation report incorporating syntax highlighted code (Page 4, middle).

With respect to **dependent claim 5**, Matlab teaches the method in which the document is a profiling report that documents relative execution times of each of the elements (page 46, execution order and signal loop, system loop)

With respect to **dependent claim 7**, Matlab teaches the method further comprising loading an element in the report in response to activating a graphical object on the graphical model representation and activating with a mouse (page 14, report generation and viewing the report page 36-38).

With respect to **dependent claims 8-9, 18-19**, Matlab teaches the method where the tags are markup language tags (See Page 25, 28 and 29)

With respect to **dependent claim 10**, Matlab teaches the method in which the report is a model coverage report (See page 1-4, 19 and 20).

In regard to **Claims 12-17, and 21**, claims 12, 14-17, and 21 reflect the system comprising computer readable instructions for performing the steps of method claims 1, 2-5, and 10 respectively, and in further view of the following, are rejected along the same rationale.

Matlab teaches the means for generating and producing a report for a simulated model and performing synthesis on a graphical model (See page 1, middle and page 4, middle). Sotomayor teaches generating tags for the objects while producing the report Sotomayor also teaches an example of an indexing component where a document is semantically broken into an index by assigning tokens for hyperlinks for each key topic or chapter (See column 3, lines 40-67 and column 4, lines 1-10). Sotomayor teaches a report is generated from the document as a summary page or presentation page. The summary pages include assigned and associated tags to elements of the document embedded within the summary page (See column 4, lines 20-45).

Sotomayor teaches an anchor to tag can be a word, phrase, or graphic (See column 5, lines 30-40) and are specifically linked to the portion of text, phrase or graphic (See also column 6, lines 49-56). The elements of the Matlab report generated in HTML can be tagged via this process, as the report is text or words in a document. Moreover, Sotomayor teaches the process of assigning a tag is processed by performing an analysis on textual data to generate the summary page (See column 8, lines 25-45). Sotomayor teaches the summary page has entries with hyperlinks to the destination anchors in the presentation page (See column 15, lines 1-20). Sotomayor teaches a wizard similar to Matlab that allows the user to edit the report using templates (See column 21, lines 1-67 and column 23, lines 20-67 and 24, lines 1-67). Sotomayor explicitly teaches a process of creating a selectable connection between the objects in the report by assigning a token to the section of the document (See column 27, lines 5-60 and column 33, lines 35-67). Solecki teaches an automatic report generation system and means that allows for instant report generation of database information related to design analysis (See column 3, lines 20-67 and column 4, lines 35-55). Solecki teaches the system can generate a report in HTML, that allow for jumping from any section of the report to another with the selection of a hyperlink (see column 3, lines 55-67

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and column 4, lines 1-10). Solecki teaches the model can be viewed within a report editor (See column 4, lines 19-35). Solecki teaches the output report can be text and viewed directly in the CAD system and allows the user to modify the links directly in the report. The system can output information about a given part or object model in the CAD system. Analysis can be performed on the part and the output can be shown on the interface. The design software outputs design space information to an object tree and to a report in real-time (See column 4, lines 35-67).

Accordingly, it would have been obvious to the skilled artisan at the time of the invention having the teachings of Matlab, Sotomayor and Solecki in front of them, to modify Matlab's component to specifically generate tags for elements of the report and creating a selectable connection between the objects in the report and to use the viewer of Solecki to see the html links in a viewer. The motivation to combine Matlab with Sotomayor comes from Sotomayor that this program can be used with a document conversion system that converts a document into a markup language (See column 35, lines 25-67 and column 36, lines 1-26) for the purposes of assigning HTML tokens to elements of a document, which allows selection and linking to related objects. The motivation to combine Solecki with Sotomayor and Matlab comes from within Solecki to have a report that presents data output from analysis of an engineering task in a manner meaningful to a user and to present in real time data from the analysis without having to use multiple pieces of software (See column 1, lines 30-50).

In regard to **Independent claim 23**, claim 23, reflect substantially similar subject matter as claim 1, therefore is rejected along the same rationale.

Claim 20 is rejected under 35 U.S.C. 102(b) as anticipated by Matlab report generator” Mathworks Inc et al. (hereinafter Matlab), in view of Sotomayor et al. (hereinafter Sotomayor) U.S. Patent No. 5708825 issued Jan. 13, 1998, in view of Solecki et al (hereinafter Solecki) U.S. Patent No. 6055541 issued Apr. 25, 2000, in further view of

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Shaughnessy et al. (hereinafter Shaughnessy) U.S. Patent No. 7015911 issued March 31, 2003.

With respect to **dependent claim 20** as indicated in the above discussion Matlab in view of Sotomayor in further view of Solecki teaches every limitation of claim 1.

Matlab teaches a report generator and teaches the report output formats can be in multiple formats (See page 15). Matlab in view of Sotomayor in further view Solecki does not specifically recite that the report can be generated using PDF links. However, this limitation would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Shaughnessy, because Shaughnessy specifically teaches generating a report in PDF format, which would have PDF embedded links (see column 2, lines 45-67). Shaughnessy suggests the combination by stating the visual representation is displayed in the target format based on the data structure format. The reports can be in PDF where the structure indicates the output type by having a specific PDF tag (See column 3, 15-20 and column 2, lines 45-67).

A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art. Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary disclosure commensurate with the specific limitations being addressed. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). In re: Upsher-Smith Labs. v. Pamlab, LLC, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); In re Fritch, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); Merck & Co. v. Biocraft Labs., Inc., 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); In re Fracalossi, 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); In re Bozek, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

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Response to Arguments

Applicant's arguments with respect to claims 1-5, 7-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6160549 to Touma, which discloses a process of generating a report from a declarative model of graphical objects and running simulation on the configured model.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M, W, F 10:00AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven B Theriault/
Primary Examiner
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